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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/955,433

09/10/2001

Tommi Virtanen

BER-019

9443

26717

7590

12/21/2005

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EXAMINER

MURPHY, RHONDA L

ART UNIT

PAPER NUMBER

2667

DATE MAILED: 12/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/955,433	VIRTANEN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Rhonda Murphy	2667	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 September 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-14 and 16-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-5, 7-10, 13, 14, 29-32, 35-38, 40 and 44 is/are rejected.
- 7) ☒ Claim(s) 6, 11, 12, 16-28, 33, 34, 39, 41-43, 45 and 46 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Amendment***

1. This communication is responsive to the amendment filed on September 23, 2005. Accordingly, claims 1 and 15 have been canceled, claims 39-46 were added and claims 2-14 and 16-46 are currently pending in this application. The claims are moot in view of new grounds of rejection.

### ***Claim Objections***

1. Claims 20,33 and 34 are objected to because of the following minor informalities: Claim 20 improperly depends upon claim 18 and shall depend upon claim 19. Claims 33 and 34 improperly depend upon canceled claim 1 and shall depend upon claim 6. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 29-32 and 35-36 are rejected under 35 U.S.C. 102(e) as being anticipated by Nikander et al. (US 6,253,321).

**Regarding claim 29**, Nikander teaches a software entity for handling data packets, the data packets belonging to a set of data packets, the software entity comprising program code means for capturing data packets (Fig. 3, 304; col. 2, lines 18-2; col. 3, lines 55-64), characterized in that it further comprises: program code means for accepting a captured data packet for processing or declining a captured data packet from processing (col. 4, lines 33-35) based on the captured data packet and data packets captured prior to the captured data packet (col. 7, lines 51-67; Fig. 5).

**Regarding claim 30**, Nikander teaches program code means for maintaining a list of modification commands (col. 5, lines 56-61), the list enabling modification of captured data packets (col. 6, lines 44-48).

**Regarding claim 31**, Nikander teaches program code means for modifying captured data packets based on said list of modification commands (col. 6, lines 44-48), and program code means for releasing modified captured data packets (Fig. 5, block 506; col. 7, lines 55-57).

**Regarding claim 32**, Nikander teaches a software entity for processing data (col. 2, lines 18-20), the software entity being adapted to receive data (col. 3, lines 55-64) and software entity comprising program code means for processing received data (col. 3, lines 55-64), program code means for determining a modification command affecting at least received data, as a response to processing the data (col. 5, lines 56-61), and the software entity being adapted to output the modification command (col. 7, lines 55-57).

**Regarding claim 35**, Nikander teaches the step of capturing data packets and processing captured data packets (col. 5, lines 19-28), characterized in that it further

comprises the step of: accepting a captured data packet for processing (col. 4, lines 33-35) or declining a captured data packet from processing (col. 4, lines 33-35) based on the captured data packet and data packets captured prior to the captured data packet (col. 7, lines 51-67; Fig. 5).

**Regarding claim 36**, Nikander further teaches the steps of: when processing at least one captured data packet, determining a modification command affecting at least one captured data packet (col. 5, lines 25-37, 54-61), and maintaining a list of modification commands (col. 5, lines 56-61), the list enabling modification of captured data packets (col. 6, lines 44-48).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 2-5, 8-10, 13-14, 40 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nikander et al. (US 6,253,321) in view of Coile et al. (US 6,006,268).

**Regarding claim 8**, Nikander teaches the method of handling data packets, said data packets belonging to a set of data packets, said method comprising: capturing data packets, accepting a captured data packet for processing (col. 4, lines 33-35) or declining a captured data packet from processing (col. 4, lines 33-35) based on the

captured data packet and data packets captured prior to the captured data packet (col. 7, lines 51-67; Fig. 5).

Nikander fails to explicitly disclose data packets having at least partly hierarchical structure and accepting data packets for processing in the order specified by said at least partly hierarchical structure.

However, Coile teaches data packets having at least partly hierarchical structure and accepting data packets for processing in the order specified by said at least partly hierarchical structure (col. 4, lines 25-38; data packet sequences).

In view of this, it would have been obvious to one skilled in the art to include a hierarchal structure, in order to accurately process data in the proper sequential order.

**Regarding claim 2**, Nikander further teaches the steps of: when processing at least one captured data packet, determining a modification command affecting at least one captured data packet (col. 5, lines 25-37, 54-61), and maintaining a list of modification commands (col. 5, lines 56-61), the list enabling modification of captured data packets (col. 6, lines 44-48).

**Regarding claim 3**, Nikander further teaches the steps of: modifying captured data packets based on the list of modification commands (col. 6, lines 44-48), and releasing modified captured data packets (Fig. 5, block 506; col. 7, lines 55-57).

**Regarding claim 4**, Nikander further teaches discarding captured data packets that are declined from processing (Fig. 5, block 504).

**Regarding claim 5**, Nikander teaches declining captured data packets.

Nikander fails to explicitly teach delaying the declined captured data packets.

Examiner takes official notice that it is known in the art for packets to be delayed when processing is declined. It would have been obvious to include delayed packets in Nikander's method, in order to temporarily hold the packets and process them at a later time.

**Regarding claim 9**, the combined method of Nikander and Coile teach a hierarchical structure. Nikander teaches accepting a captured data packet for processing, if data packet(s) immediately preceding said captured data packet is already processed.

It would have been obvious to accept a captured data packet for processing if data packets immediately preceding the capture packet in the partly hierarchical structure is/are already processed, since packets in an at least partly hierarchical structure contain packets in sequential order, which are further processed in sequential order.

**Regarding claim 10**, the combined method of Nikander and Coile teach a hierarchical structure. Nikander teaches declining a captured data packet from processing, if a data packet immediately preceding said captured data packet is not yet captured.

It would have been obvious to decline a captured data packet from processing if data packets immediately preceding the capture packet in the partly hierarchical structure is not yet captured, since packets in an at least partly hierarchical structure contain packets in sequential order, which are further processed in sequential order.

**Regarding claim 13**, the combined method of Nikander and Coile teach a hierarchical structure, as described above in the rejection of claim 8. Coile further teaches the hierarchical structure as a sequence of data packets (col. 4, lines 25-38).

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**Regarding claim 14**, the combined method of Nikander and Coile teach a hierarchical structure. It is well known in the art that hierarchical structures can form a hierarchically structured tree. In view of this, it would have been obvious to include a hierarchically structured tree, so as to process data from various branches/sections of the hierarchical tree.

**Regarding claims 40 and 44**, Nikander teaches the same limitations described in the rejection of claim 8. Furthermore Nikander teaches a storage medium carrying a computer-executable software entity (col. 2, lines 18-20).

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nikander et al. in view of Coile et al. and Xie et al. (US 6,772,347).

**Regarding claim 7**, Nikander teaches the steps of: declining a captured data packet from processing. Nikander fails to disclose declining the packet if the packet is already processed and releasing the packet.

However, Xie teaches declining a captured data packet that is already processed and releasing the captured data packet (col. 5, lines 60-67; col. 6, lines 1-5).

In view of this, it would have been obvious to one skilled in the art to modify Nikander's method by declining already processed packets and releasing the packet, in order to prevent the re-processing of already processed data packets, which will produce a more efficient method of handling packets.



6. Claims 37-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nikander et al. in view of Adelman et al. (US 6,006,259).

**Regarding claim 37**, Nikander teaches capturing data packets, accepting a captured data packet for processing (col. 4, lines 33-35) or declining a captured data packet from processing (col. 4, lines 33-35) based on the captured data packet and data packets captured prior to the captured data packet (col. 7, lines 51-67; Fig. 5).

Nikander fails to teach a network element cluster.

However, Adelman teaches a cluster of network elements (col. 2, lines 55-59).

In view of this, it would have been obvious to one skilled in the art to modify the method of Nikander by including a cluster of network elements in order to enable other elements within a network to process the captured data packets.

**Regarding claim 38**, Nikander teaches data packets belonging to a set of data packets first handled in a first node (all elements of Fig. 3) and a list of modification commands maintained in the first node (Fig. 3; col. 5, lines 56-61).

Nikander fails to explicitly teach a cluster of network elements and the transfer of modification commands.

However, Adelman teaches a cluster of network elements and transmitting the list of modification commands from the first node to a second node of the cluster of network elements (col. 11, lines 34-36, 62-67).

In view of this, it would have been obvious to one skilled in the art to modify the method of Nikander by including a cluster of network elements and the transmission of

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commands, in order to enable other elements within a network to process the captured data packets.

### ***Allowable Subject Matter***

7. Claims 6, 11,12, 16-28,33,34,39,41-43, 45 and 46 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rhonda Murphy whose telephone number is (571) 272-3185. The examiner can normally be reached on Monday - Friday 8:00 - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (571) 272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

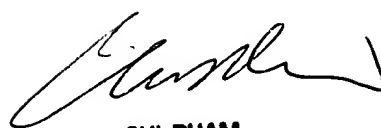
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